

REMARKS

Reconsideration of the present application in view of the following remarks and above amendments is respectfully requested.

Rejections based on 35 U.S.C. § 103(a)

A) Applicable Authority

Title 35 U.S.C. § 103(a) declares, a patent shall not issue when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” The Supreme Court in *Graham v. John Deere* counseled that an obviousness determination is made by identifying: the scope and content of the prior art; the level of ordinary skill in the prior art; the differences between the claimed invention and prior art references; and secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1 (1966). To support a finding of obviousness, the initial burden is on the Office to apply the framework outlined in *Graham* and to provide some reason, or suggestions or motivations found either in the prior art references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the prior art reference or to combine prior art reference teachings to produce the claimed invention. See *Application of Bergel*, 292 F. 2d 955, 956-957 (CCPA 1961). Recently, the Supreme Court elaborated, at pages 13-14 of the *KSR* opinion, it will be necessary for [the Office] to look at interrelated teachings of multiple [prior art references]; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by [one of] ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the [patent application].” *KSR v. Teleflex*, No. 04-1350, 550 U.S. 398 (2007).

B) Obviousness Rejections Based on U.S. Patent No. 6,857,053 ("Bolik")

Claims 1, 7, 10, 12, 18, and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bolik. Applicant respectfully traverses this rejection because the prior art, including Bolik fails to describe or suggest all elements of the inventions of amended independent claims 1, 18, and 27.

Amended independent claim 1 recites a method for initiating the transmission of data. The method comprises establishing, via a communication engine, a connection from at least one data source to a destination. In turn, the communication engine generates sessions to transmit data via the connection from the at least one data source to the destination, where generating sessions comprise invoking an application programming interface and receiving a session acceptance from the destination via the application programming interface. A set of messages from the sessions for transmission over the connection to the destination are queued. The messages from two sessions from different data sources are combined dynamically when the connection has excess bandwidth available to support the combined message stream. The queued set of messages and combined messages are transmitted based upon completion information associated with the queued set of messages. The completion information comprises results from a completion port operation of at least one of sending or receiving and a window size available at the destination.

It is respectfully submitted that the cited prior art, including Bolik, fails to describe or suggest, among other things, *combining, dynamically, messages from at least two separate sessions for the destination having different data sources to generate a combined message stream when the connection has excess bandwidth available to support the combined message stream; and transmitting messages from the queued set of messages and the combined*

messages based upon completion information associated with the queued set of messages stored in a queue at a dispatcher, wherein the completion information comprises results from a completion port operation of at least one of sending or receiving and a window size available at the destination, as recited in amended independent claim 1.

The Office relies upon Bolik, at col. 3, ll. 12-45; col. 4, ll. 53-56; col. 5, ll. 65-67; and col. 6, ll. 3-37. The cited portions of Bolik describe creating backup groups at a backup server. Bolik describes a backup client executing at the client devices to generate group identifiers. Nothing in Bolik describes or suggests dynamically combining messages from at least two separate sessions for the destination having different data sources to generate a combined message stream or transmitting messages from the queued set of messages and the combined messages based upon completion information associated with the queued set of messages stored in a queue at a dispatcher.

Unlike Bolik, the invention of amended independent claim 1, requires, among other things, combining, dynamically, messages from at least two separate sessions for the destination having different data sources to generate a combined message stream when the connection has excess bandwidth available to support the combined message stream; and transmitting messages from the queued set of messages and the combined messages based upon completion information associated with the queued set of messages stored in a queue at a dispatcher, wherein the completion information comprises results from a completion port operation of at least one of sending or receiving and a window size available at the destination. Bolik fails to expressly or inherently describe or suggest all elements of the invention of amended independent claim 1. Accordingly, for at least the above reasons, Applicant

respectfully requests withdrawal of the obviousness rejection and allowance of amended independent claim 1.

Dependent claims 2-4, 7, and 9-12 further define novel features of the invention of amended independent claim 1 and each depend, directly or indirectly, from amended independent claim 1. Accordingly, for at least the reasons set forth above with respect to amended independent claim 1, dependent claims 2-4, 7, and 9-12 are believed to be in condition for allowance by virtue of their dependency. *See*, 37 C.F.R. §1.75(c). As such, withdrawal of the obviousness rejection of dependent claims 2-4, 7, and 9-12 is respectfully requested.

Amended independent claim 18 recites one or more computer-readable media storing instructions for performing a method to send a transmissible message over a communication network. The method comprises establishing a connection from at least one data source to a destination and establishing sessions to transmit data via the connection from the at least one data source to the destination, where establishing sessions comprise invoking an application programming interface and receiving a session acceptance from the destination. In turn, at least one message from the sessions for transmission over the connection to the destination is queued, where queuing the at least one message comprises queuing the at least one message in at least one input/output buffer and assigning each message varying time periods that cause the message to expire in the queue if an acknowledgement from the destination is not received within the time period. The messages from two sessions from different data sources are combined dynamically when the connection has excess bandwidth available to support the combined message stream. The communication of the at least one queued message and the combined message are regulated based upon completion information associated with the at least one input/output buffer.

It is respectfully submitted that the cited prior art, including Bolik, fails to describe or suggest, among other things, *queuing at least one message from the sessions for transmission over the connection to the destination, wherein queuing the at least one message comprises queuing the at least one message in at least one input/output buffer and assigning each message varying time periods that cause the message to expire in the queue if an acknowledgement from the destination is not received within the time period; and combining, dynamically, messages from at least two separate sessions for the destination having different data sources to generate a combined message stream when the connection has excess bandwidth available to support the combined message stream*, as recited in amended independent claim 18.

The Office relies upon Bolik to render the invention of amended independent claim 18 unpatentable. As discussed above, the cited portions of Bolik describes archiving data at a backup server and defining backup groups. However, nothing in Bolik describes or suggests dynamically combining messages from at least two separate sessions for the destination having different data sources to generate a combined message stream or assigning queued messages a time period for expiration in the queue.

Unlike Bolik, the invention of amended independent claim 18, requires, among other things, *queuing at least one message from the sessions for transmission over the connection to the destination, wherein queuing the at least one message comprises queuing the at least one message in at least one input/output buffer and assigning each message varying time periods that cause the message to expire in the queue if an acknowledgement from the destination is not received within the time period; and combining, dynamically, messages from at least two separate sessions for the destination having different data sources to generate a combined message stream when the connection has excess bandwidth available to support the combined*

message stream. Bolik fails to expressly or inherently describe or suggest all elements of the invention of amended independent claim 18. Accordingly, for at least the above reasons, Applicant respectfully requests withdrawal of the obviousness rejection and allowance of amended independent claim 18.

Dependent claims 19-21 and 25-26 further define novel features of the invention of amended independent claim 18 and each depend, directly or indirectly, from amended independent claim 18. Accordingly, for at least the reasons set forth above with respect to amended independent claim 18, dependent claims 19-21 and 25-26 are believed to be in condition for allowance by virtue of their dependency. *See*, 37 C.F.R. §1.75(c). As such, withdrawal of the obviousness rejection of dependent claims 19-21 and 25-26 is respectfully requested.

Amended independent claim 27 recites one or more computer-readable media storing instructions for transporting large data sets across a communication network. The method comprises establishing one or more sessions between a plurality of data sources and a storage server by transmitting session requests from output queues at a dispatcher to a destination queue at the storage server and transmitting an acknowledgement that the session requests are accepted from the storage server to the data source. Data messages received from each data source are buffered at an assigned output queue until the assigned output queue is full. Messages from at least two separate sessions for the destination having different data sources are dynamically combined to generate a combined message stream when a connection between the data sources and storage server has excess bandwidth available to support the combined message stream. In turn, the data messages and the combined messages are transmitted to the destination queue at the storage server. An acknowledgment receipt of the data messages is received, at the

assigned output queue, from each data source. The acknowledgement receipt includes a window size remaining at the destination queue. Additional data messages and additional combined messages from the data sources are transmitted to the destination queue at the storage server based on the window size included in the acknowledgment receipt.

It is respectfully submitted that the cited prior art, including Bolik, fails to describe or suggest, among other things, *combining, dynamically, messages from at least two separate sessions for the destination having different data sources to generate a combined message stream when a connection between the data sources and storage server has excess bandwidth available to support the combined message stream; and receiving, at the assigned output queue, an acknowledgment receipt of the data messages received from each data source, the acknowledgment receipt comprises a window size available at the destination queue, as recited in amended independent claim 27.*

The Office relies upon Bolik to render the invention of amended independent claim 27 unpatentable. As discussed above, the cited portions of Bolik describes a backup server that stores backup data in groups. Nothing in Bolik describes or suggests, among other things, dynamically combining messages from at least two separate sessions for the destination having different data sources to generate a combined message stream or an acknowledgment receipt of the data messages received from each data source, the acknowledgment receipt comprises a window size available at the destination queue.

Unlike Bolik, the invention of amended independent claim 27, requires, among other things, combining, dynamically, messages from at least two separate sessions for the destination having different data sources to generate a combined message stream when a connection between the data sources and storage server has excess bandwidth available to

support the combined message stream; and receiving, at the assigned output queue, an acknowledgment receipt of the data messages received from each data source, the acknowledgment receipt comprises a window size available at the destination queue. Bolik fails to expressly or inherently describe or suggest all elements of the invention of amended independent claim 27. Accordingly, for at least the above reasons, Applicant respectfully requests withdrawal of the obviousness rejection and allowance of amended independent claim 27.

C) Obviousness Rejections Based on Bolik in view of U.S. Patent Publication No. 2003/0079121 ("Gilman").

Claims 2-4, 11, 19-21, and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bolik in view of Gilman. Applicant respectfully traverses this rejection because the prior art, including Bolik and Gilman fails to teach or suggest all elements of the inventions of amended independent claims 1 and 18.

Claims 2-4 and 11 depend from amended independent claim 1. Claims 19-21 and 26 depend from amended independent claim 18. As discussed above, Bolik fails to describe or suggest all the elements of amended independent claims 1 and 18. Accordingly, claims 2-4, 11, 19-21, and 26 are patentable over Bolik for at least the above-cited reasons. The addition of Gilman fails to cure the deficiencies of Bolik with respect to the elements of amended independent claims 1 and 18. As such, Applicant respectfully requests withdrawal of the obviousness rejection and allowance of dependent claims 2-4, 11, 19-21, and 26.

D) Obviousness Rejections Based on Bolik in view of U.S. Patent No. 6,223,207 ("Lucovsky").

Claims 9 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bolik in view of Lucovsky. Applicant respectfully traverses this rejection because the prior art, including Bolik and Lucovsky fail to teach or suggest all elements of the inventions of amended independent claims 1 and 18.

Claim 9 depends from amended independent claim 1. Claim 25 depends from amended independent claim 18. As discussed above, Bolik fails to teach or suggest all the elements of amended independent claims 1 and 18. Accordingly, claims 9 and 25 are patentable over Bolik for at least the above-cited reasons. The addition of Lucovsky fails to cure the deficiencies of Bolik with respect to the elements of amended independent claims 1 and 18. As such, Applicant respectfully requests withdrawal of the obviousness rejection and allowance of dependent claims 9 and 25.

CONCLUSION

For at least the reasons stated above, the pending claims are now in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned to resolve the same. It is believed that no fee is due, however, the Commissioner is hereby authorized to charge any amount required to Deposit Account No. 19-2112, referencing Attorney Docket No. 303128.01/MFCP.103654.

Respectfully submitted,

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